

11/10/00
JC951 U.S. PTO

Practitioner's Docket No. 7754-P

PATENT

Preliminary Classification:
Proposed Class:
Subclass:

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Box Patent Application
Assistant Commissioner for Patents
Washington, D.C. 20231

NEW APPLICATION TRANSMITTAL

Transmitted herewith for filing is the patent application of

Inventor(s): Edwin D. Ebner

For (title): AIR BLOWER FOR EXTINGUISHING FIRES

1. Type of Application

This transmittal is for an original (nonprovisional) application.

2. Papers Enclosed

A. Required for filing date under 37 C.F.R. 1.53(b) (Regular) or 37 C.F.R. 1.153 (Design)

CERTIFICATION UNDER 37 C.F.R. SECTIONS 1.8(a) AND 1.10*
(When using Express Mail, the Express Mail label number is **mandatory**;
Express Mail certification is optional.)

I hereby certify that, on the date shown below, this correspondence is being:

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☒ deposited with the United States Postal Service in an envelope addressed to the Assistant Commissioner for Patents,
Washington, D.C. 20231.
37 C.F.R. Section 1.8(a)

37 C.F.R. Section 1.10*

☐ with sufficient postage as first class mail.

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TRANSMISSION

☐ transmitted by facsimile to the Patent and Trademark Office (703) _____

Date: November 10, 2000

Signature

Philip Furgang

(type or print name of person certifying)

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Each paper or fee filed by "Express Mail" **must** have the number of the "Express Mail" mailing label placed thereon prior to mailing. 37 C.F.R. Section 1.10(b).
"Since the filing of correspondence under [Section] 1.10 without the Express Mail mailing label thereon is an oversight that can be avoided by the exercise of reasonable care, requests for waiver of this requirement will **not** be granted on petition." Notice of Oct. 24, 1996, 60 Fed. Reg. 56,439, at 56,442.

(New Application Transmittal--page 1 of 4)

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Application

10 Page(s) of Specification
6 Page(s) of Claims
4 Sheet(s) of Drawing(s)--Informal

B. Other Papers Enclosed

2 Page(s) of declaration and power of attorney
1 Page(s) of abstract
1 Page(s) of Statement Claiming Small Entity Status

3. Additional Papers Enclosed

None

4. Declaration or Oath

Enclosed

Executed by:
* inventor.

5. Inventorship Statement

The inventorship for all the claims in this application is the same.

6. Language

English

7. Fee Calculation (37 C.F.R. Section 1.16)

Regular Application

| CLAIMS AS FILED | | | | | |
|--|--------------|---------------------|--------------|----------|--------------------------------------|
| Claims | Number Filed | Basic Fee Allowance | Number Extra | Rate | Basic Fee 37 CFR 1.16(a) \$710.00 |
| Total Claims (37 CFR 1.16(c)) | 24 | - 20 = | 4 x | \$18.00 | \$72.00 |
| Independent Claims (37 CFR 1.16(b)) | 5 | - 3 = | 2 x | \$80.00 | \$160.00 |
| Multiple Dependent Claim(s), if any (37 CFR 1.16(d)) | | | + | \$270.00 | \$0.00 |

Filing Fee Calculation \$942.00

8. Small Entity Statement(s)

Statement that this is a filing by a small entity under 37 C.F.R. Sections 1.9 and 1.27 is attached.

Filing Fee Calculation (50% of above) \$471.00

9. Fee Payment Being Made at This Time

Enclosed
Filing Fee \$471.00

Total Fees Enclosed \$471.00

10. Method of Payment of Fees

Check in the amount of \$471.00 is attached.

11. Authorization to Charge Additional Fees

The Commissioner is hereby authorized to charge the following additional fees by this paper and during the entire pendency of this application to Account No. 06-2426.

37 C.F.R. Section 1.16(a), (f) or (g) (filing fees)

37 C.F.R. Section 1.16(b), (c) or (d) (presentation of extra claims)

37 C.F.R. Section 1.16(e) (surcharge for filing the basic filing fee and/or declaration on a date later than the filing date of the application)

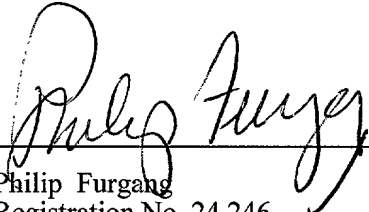
37 C.F.R. Section 1.17(a)(1)-(5) (extension fees pursuant to SECTION 1.136(a))

37 C.F.R. Section 1.17 (application processing fees)

12. Instructions as to Overpayment

Refund.

Date: 11/10/00


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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Ebner, Edwin D.

Title: AIR BLOWER FOR EXTINGUISHING FIRES

**STATEMENT CLAIMING SMALL ENTITY STATUS
(37 CFR 1.9(f) and 1.27(b))--INDEPENDENT INVENTOR**

As a below named inventor, I hereby state that I qualify as an independent inventor, as defined in 37 CFR 1.9(c), for purposes of paying reduced fees to the United States Patent and Trademark Office under Sections 41(a) and (b) of Title 35, United States Code, to the Patent and Trademark Office, with regard to the invention described in the specification filed herewith, with title as listed above.

I have not assigned, granted, conveyed or licensed, and am under no obligation under contract or law to assign, grant, convey or license, any rights in the invention to any person who would not qualify as an independent inventor under 37 CFR 1.9(c), if that person had made the invention, or to any concern that would not qualify as a small business concern under 37 CFR 1.9(d), or a nonprofit organization under 37 CFR 1.9(e).

No person, concern or organization exists to which I have assigned, granted, conveyed, or licensed or am under an obligation under contract or law to assign, grant, convey, or license any rights in the invention.

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

Edwin D. Ebner


Signature of Inventor

Date 11/7/00

**AIR BLOWER FOR EXTINGUISHING FIRES AND
METHOD FOR EXTINGUISHING FIRES**

BACKGROUND OF THE INVENTION - FIELD OF THE INVENTION

A device for extinguishing fires and a method of extinguishing fires.

BACKGROUND OF THE INVENTION - DESCRIPTION OF THE PRIOR ART

Every year, wild fires burn across the United States. Vast areas of forest land in the American mid-west such as Montana, Idaho and Wyoming burn every year. These fires are started by campers being careless with camp fires and lightning. The wild fires often spread quickly and threaten towns, homes and property.

In the year 2000 alone, 27,000 fire fighters combated 73,000 separate fires. These fires claimed over 6.3 million acres. The cost of fighting these wild fires is estimated to be 1 billion dollars. The total economic loss from fires, including property damages and loss of businesses, is estimated to be 10 billion dollars. More importantly, every year, many fire- fighters lose their lives combating the blazes.

Many types of equipment are used to combat wild fires. An effective tool is the use of airplanes to drop fire retardant chemicals and water on the affected area. Water is used to extinguish the blaze, whereas fire retardant chemicals are used to stop the advancement of the fire. Regardless of the advancement in firefighting equipment, the most work is done by fire- fighters on the ground.

Firefighters combat the blaze by extinguishing the fire directly or starting a back fire. A back fire is the controlled burn of forest in advance of the forest fire. By burning the land, a fire line is created. When the forest fire advances to the area burnt by the back fire, it can no longer advance for lack of fuel. Once a fire line is created by a back fire, the main blaze is allowed to burn itself out. This method is effective because the firefighters do not have to come in close proximity to the wild fire. However, back fires must be properly executed or they will become as great a problem as the original fire. It is important that the back fire advance in a direction toward the main forest fire. A sudden shift in winds can prevent the proper advancement of a back fire.

Firefighters on the ground use tools such as chain saws to create proper conditions for starting a back fire. Trees and heavy brush are cut and set ablaze when the conditions are optimal to cause a back fire to advance in a direction toward the main fire.

The prior art discloses several different types of apparatus using the exhaust of an engine to combat a fire. One such example is disclosed in U.S. Patent 4,614,237 (*Colodner et al.*). *Colodner et al.* discloses a combination fire extinguisher and blower. An internal combustion engine powers the blower and includes a hose coupled to the exhaust pipe cover and the air inlet of the blower. The hose pipe exhausts gas into the blower when such gas is needed to extinguish a fire. A second hose is provided on the blower having one end secured to a sleeve fastened to an air cooled nozzle and is used to blow air or exhaust gas, whenever needed.

U.S. Patent 5,848,652, issued to *Bennett*, discloses a fire suppression system for an engine compartment of a vehicle. A remotely controlled throttle valve disposed within the exhaust duct of the engine selectively diverts exhaust gas through a bypass duct for mixing with ventilation air flow. By mixing the gases and the air flow, the oxygen content is reduced in the air flow over the engine. The reduced oxygen content will inhibit combustion.

Another prior art device is disclosed in U.S. Patent 5,154,238, issued to *Buchan*. *Buchan* discloses a fire protection apparatus having spray nozzles oriented adjacent engines of an airplane. Quick connect coupling secure a conduit to the spray nozzles and deliver a fire extinguishing agent such as carbon dioxide directly to the engine to extinguish a fire.

SUMMARY OF THE INVENTION

It is an object of the invention to provide a firefighting tool that can be used for both extinguishing fires and starting back fires.

It is another object of the invention to provide a firefighting tool that can be carried on the firefighter's back to leave the hands free for other tasks.

It is yet another object of the invention to provide a lightweight inexpensive but effective firefighting tool.

It is another object of the invention to provide a method for extinguishing fires including operating a blower having an engine and an output hose creating an output of air through the output hose to form an airstream, diverting exhaust from the engine into said airstream and directing the airstream at the fire.

It is still another object of the invention to provide a method for starting back fires including operating a blower, the blower having an engine and an output hose, creating an output of air through the output hose to form an airstream, starting a back fire, and using the airstream of the blower to promote the spread of the backfire and direct the advancement of the back fire.

5 It is another object of the invention to provide a device for extinguishing fires or starting back fires having an engine to create an air flow, an output hose to direct the air flow and a valve for selectively adding exhaust from the engine to the air flow.

It is yet another object of the invention to provide a diverter valve within a Y-shaped valve of a blower, the valve acts to direct the exhaust of the blower to the output hose of the blower or to an exhaust outlet.

These and other objects of the invention will be apparent to one of ordinary skill in the art after reading the description of the invention that follows.

10 The invention resembles a blower used by commercial landscapers. The device has an engine mounted on a frame. Shoulder straps attached to the frame allow the user to wear the device on his back. This leaves the hands free to operate the blower or other tools such as a chain saw or perform other tasks. Also, wearing the device on the back makes it easier to transport the device over long distances to the source of the fire or back fire to be started.

15 The device generates a stream of air at high speeds. This stream of air can be used to blow out a fire when the air is directed at the source of the fire. When used to extinguish a fire, exhaust from the engine is diverted through a Y-shaped valve into the airstream. This has a

twofold affect as it increases the speed of the airstream and increases the amount of carbon monoxide and carbon dioxide in the airstream to starve the fire of oxygen.

The device can also be used to start back fires. After the appropriate location of a back fire has been selected, a fire is started. The airstream created by the device can be used to both encourage the propagation of the fire and direct the fire towards the main wild fire. The ability to quickly spread the back fire in the proper direction is imperative because a sudden change in wind direction or other weather conditions could cause the back fire to become as big a problem as the original fire.

In one aspect of this invention there is provided a method of extinguishing a fire. The method comprises the steps of operating a blower, said blower having an engine and an output hose, creating an output of air from the engine to form an air stream, diverting exhaust from said engine into said air stream, and directing said air stream with the output hose at the fire.

In another aspect of this invention there is provided a method of starting back fires. The method comprising the steps of starting a fire, operating a device to create an air stream, directing said air stream at said fire, and causing the fire to spread in a controlled manner.

In still another aspect of this invention there is provided a for diverting exhaust. The pipe comprises an exhaust inlet, an exhaust outlet, and an exhaust bypass. There is also provided a valve within the pipe for diverting the exhaust into either the exhaust outlet or exhaust bypass.

In yet another embodiment of this invention there is provided a device for extinguishing fires and starting back fires. The device comprises an engine. The engine creates an air stream and an exhaust. An air output hose is used for directing the air stream at a fire or back fire. At least one hose for selectively diverting the exhaust into the air stream.

5 In still a further aspect of this invention there is provided a valve. The valve comprises a shutter body attached to a pivot pin. A valve rod extending from a portion of the pivot pin. A cable attached to the valve rod for moving the valve shutter body from a first position, blocking the exhaust outlet, to a second position, blocking the exhaust bypass.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a front view of the device;

FIG. 2 is a view of the left side of the device;

FIG. 3 is a view of the right side of the device;

FIG. 4 is a view of the Y-shaped valve;

FIG. 5 is a view of the Y-shaped valve with portions cut away to show operation of the valve; and

FIG. 6 is a view of the valve within the Y-shaped valve.

DETAILED DESCRIPTION OF THE INVENTION

The device is clearly depicted in FIG. 1. The device is a blower **10** having an engine **11** to create an airstream. The blower **10** is attached to a frame **12**, as is well known in the

art. The blower **10** may have an air outlet hose **18**. The air outlet hose **18** allows the user to direct the generated airstream.

A Y-shaped valve **30** comprising an input leg **33** and first and second output exhaust legs **34** and **36**, respectively. Exhaust, created by the internal combustion of the engine **11**, may flow through an exhaust output pipe **31** which is connected to the input leg **33** of the Y-shaped valve **30**. The exhaust output pipe **31** connects to the exhaust input leg **33** (FIGS. 5 and 6) of a Y-shaped valve **30** comprising an input leg **33**, and a first and second output exhaust legs **34** and **36**, respectively. A conduit **22** may be connected to a port (not shown) in the blower **10** approximately 180° before the outlet hose **18**. Conduit **22** may be coupled by a T-connection **29** (FIGS. 1 and 2) to the engine exhaust pipe **31** (FIG. 4). The Y-shaped valve **30** receives the supply of air from the blower **10** from T couple **29**. The air cools and speeds the flow of the exhaust gas as will be explained later.

The exhaust gas and air enters the Y-shaped valve **30** and may either exit the Y-shaped valve **30** through the first exhaust outlet leg **34** (FIGS. 5 and 6) to the atmosphere or may be diverted to the second output exhaust leg **36** of the Y-shaped valve **30** into the blower **10** where the air stream is about to exit outlet hose **18**.

FIG. 2 shows the left side of the device. As may be seen in this view, the device has shoulder straps **14** attached to the frame **12** to allow the operator to carry the device on his back. The orientation and location of the Y-shaped valve **30** prevents the exhaust exiting either of the two exhaust legs **34** or **36** from interfering with the breathing of the operator.

The right side of the device, as shown in FIG. 3, shows the air outlet **18** of the blower **10**. The engine exhaust may be diverted by the Y-shaped valve **30** through the second exhaust leg **36** which may be coupled to an exhaust delivery hose **52**. The other end of the delivery hose **52** is connected to a port or opening **53** into the housing the blower **10** at a point just before the air outlet **18**. In this way, exhaust gasses may be delivered into the airstream created by the blower **10** thereby increasing the flow of the output gases as well as adding such flame retarding exhaust constituents as carbon monoxide and carbon dioxide to the exhaust stream.

The diversion of the exhaust is more fully explained with reference to FIG. 4. The exhaust intake leg **31** of the Y-shaped valve **30** may be selectively connected to the first or second exhaust outlet leg **34** or **36**, respectively. Attached to the second exhaust outlet leg **36** is, as previously discussed, the exhaust delivery hose **52**. A control element such as a flapper valve or shuttle **62** pivotally secured by a pivot pin **64** or the like at the Y junction of the Y-shaped valve **30**. The valve member **62** may be used to determine whether the exhaust and air combination passes to outlet hose **18** of blower **10** or passes direct through the first exhaust leg **34**. Alternatively, well known valve constructions may be used in place of the Y-shaped valve **30** (e.g., ball or slider valves).

A valve rod **72** may be connected, at one end, to a flexible valve actuating cable **45**. Such cables are well known in the art. A bracket **42** may be secured to the second exhaust output leg **36**. A cable guide **49**, again, well known in the art, may be attached to the bracket **42** for receiving and supporting the cable **45**. The cable **45** extends through the guide **49**. The guide **49**

insures smooth operation of the cable **45**, as is well known in the art. Movement of the cable **45**, in turn, moves the rod **72** to affect movement of the flapper valve **62**.

The combination of the Y-shaped valve **30** with the flapper valve **62** is better seen with reference to FIGS. 5 and 6 which provide a sectional view of the Y-shaped valve **30** in the vicinity of the flapper valve **62**. Thus, as previously indicated the Y-shaped valve **30** has therewithin a shutter valve body **62** connected to a pivot pin **64**. The valve rod **72** is connected to the pivot pin **64**. Movement of the rod **72** may be caused by actuation of the cable **45**. The shutter **62** may be connected to the pivot pin **64** to move the shutter from a first position, shown in FIG. 5, to a second position, shown in phantom in FIG. 5 in the direction of the arrow **63**. In the first position, the exhaust and air coming through exhaust intake leg **32** is diverted into the second exhaust leg **36**. The exhaust delivery hose **52** then carries the mixture of exhaust and air from the second exhaust leg **36** to the juncture **53** with the blower **10** just before the air outlet hose **18**. When the shutter valve **62** is moved to the second position (shown in phantom) the exhaust and air combination flows directly from the exhaust pipe **32** through the first exhaust outlet pipe **34**.

In operation, the blower **10** generates a stream of air which exits blower port **18** at high speeds. This stream of air can be used to blow out a fire when the air is directed at the source of the fire. When used to extinguish a fire, exhaust from the engine, mixed with air from the blower **10**, is diverted through a Y-shaped valve **30** into the blower airstream just before the

output port **18**. This has a twofold affect: it increases the speed of the airstream and increases the amount of carbon monoxide and carbon dioxide in the airstream to starve the fire of oxygen.

The device can also be used to start back fires. After the appropriate location of a back fire has been selected, a fire is started. The airstream (without the addition of the exhaust) created by the device can be used to both encourage the propagation of the fire and direct the fire towards the main wild fire. The ability to quickly spread the back fire in the proper direction is imperative because a sudden change in wind direction or other weather conditions could cause the back fire to become as big a problem as the original fire.

Yet another use for this device is contain small chemical or oil spills by using the blower **10** to divert the liquid to a safer area.

While the invention has been described with reference to a preferred embodiment, modifications and variations would be obvious to one of ordinary skill in the art without departing from the scope of the invention. The exact description of the invention is not intended to be limiting in any way but to cover these modifications and variations.

WHAT IS CLAIMED IS:

1. A method of extinguishing a fire, comprising the steps of
 - a) providing an engine;
 - b) providing a blower connected to the engine for providing an output stream of air;
 - c) driving the blower with the engine;
 - d) diverting engine exhaust into the air stream, and
 - e) directing the air stream from the blower with the output hose at the fire.
2. The method of Claim 1, the step of diverting the exhaust comprises diverting the exhaust into blower before the output hose.
3. The method of Claim 1, further comprises providing a Y-shaped valve which has an input leg and two output legs and wherein the step of diverting comprises directing the exhaust through the Y-shaped valve.
4. The method of Claim 1, further comprises providing valve means, and the step of diverting includes directing the exhaust flow with the valve means.

5. The method of Claim 4, wherein the step of diverting further comprises providing means for tapping into the blower air stream before the blower exhaust; the step of diverting the exhaust includes mixing the exhaust with the tapped air and moving the mixed air and exhaust through the valve.

6. The method of Claim 5, wherein the step of diverting further comprises either diverting the mixed air and exhaust by the valve means so as to divert the air exhaust selectively to the blower output.

7. A method of starting back fires of the type required where there is a pre-existing fire, comprising the steps of

- a) starting a fire,
- b) providing a device capable of producing an air stream;
- c) producing the air stream,
- d) directing the air stream at the fire, and
- e) causing the fire to spread in a controlled manner.

7. The method of Claim 6, wherein the step of causing the fire to spread in a controlled manner comprises directing the fire toward the prior fire.

8. The method of claim 6, further comprises providing an air output hose; directing the air stream with the air output hose.

9. The method of claim 8, further comprises providing a blower driven by an engine and creating the air stream by the blower engine.

10. A device for diverting gas comprising,

- a) an exhaust inlet, and at least two exhaust outlets,
- b) a valve member for selectively diverting the gas into either the exhaust outlet or exhaust bypass; and
- c) the valve comprises a planar valve member pivotally connected at the junction of the inlet and two exhaust outlet; and
- d) means for pivotally moving said planar valve member from a first position to a second position to alternatively block the flow of the gas out of the first or second exhaust outlets.

11. The device of Claim 10, further comprising a valve rod and a pivot pin; said valve rod is pivotally connected to said pivot pin, said valve rod extending from said pin for manipulating said valve.

12. The device of Claim 11, further comprising a cable attached to said valve rod for moving said valve shutter body between said first and second positions.

13. The device of Claim 12, wherein said inlet and exhaust outlets comprise a substantially Y-shaped valve and said device further comprises guide means secured to said pipe for guiding said cable.

15 A device for extinguishing fires and starting back fires, comprising

- a) an engine and blower means, said engine operating said blower means to create an air stream,
- b) an air output hose for directing said air stream at a fire or back fire,

and

- c) at least one hose for selectively diverting the exhaust into said air stream.

16. The device of claim 15, further comprises a pipe; said hose comprises an exhaust delivery hose and at an exhaust output hose connected to said pipe, said exhaust delivery hoses connected to the pipe and the air blower means proximate said air output hose.

17. A device according to Claim 16

wherein, said pipe comprises an exhaust inlet, an exhaust outlet and an exhaust bypass, and

a valve for selectively diverting the exhaust into one of the exhaust outlet or exhaust bypass.

18. The device of Claim 17, wherein said valve is located at the junction of the exhaust outlet and the exhaust bypass.

19. The device of claim 18, wherein said valve comprises a shutter body pivotally attached to a pivot pin.

20. The device of claim 19, further comprising a valve rod secured to said pivot pin and extending without said pipe.

21. The pipe of claim 20, further comprising a cable attached to the valve rod for moving said valve shutter body from a first position, blocking the exhaust outlet to a second position blocking the exhaust bypass.

22. The pipe of claim 23, further comprising a bracket attached to said pipe, the bracket having a guide for the cable.

23. The pipe of claim 24, wherein said bracket is attached to the exhaust bypass.

24. A valve of the type having an inlet port and two outlet ports,

a) said valve comprises a shutter body and a pivot pin, said shutter body being secured to said pivot pin,

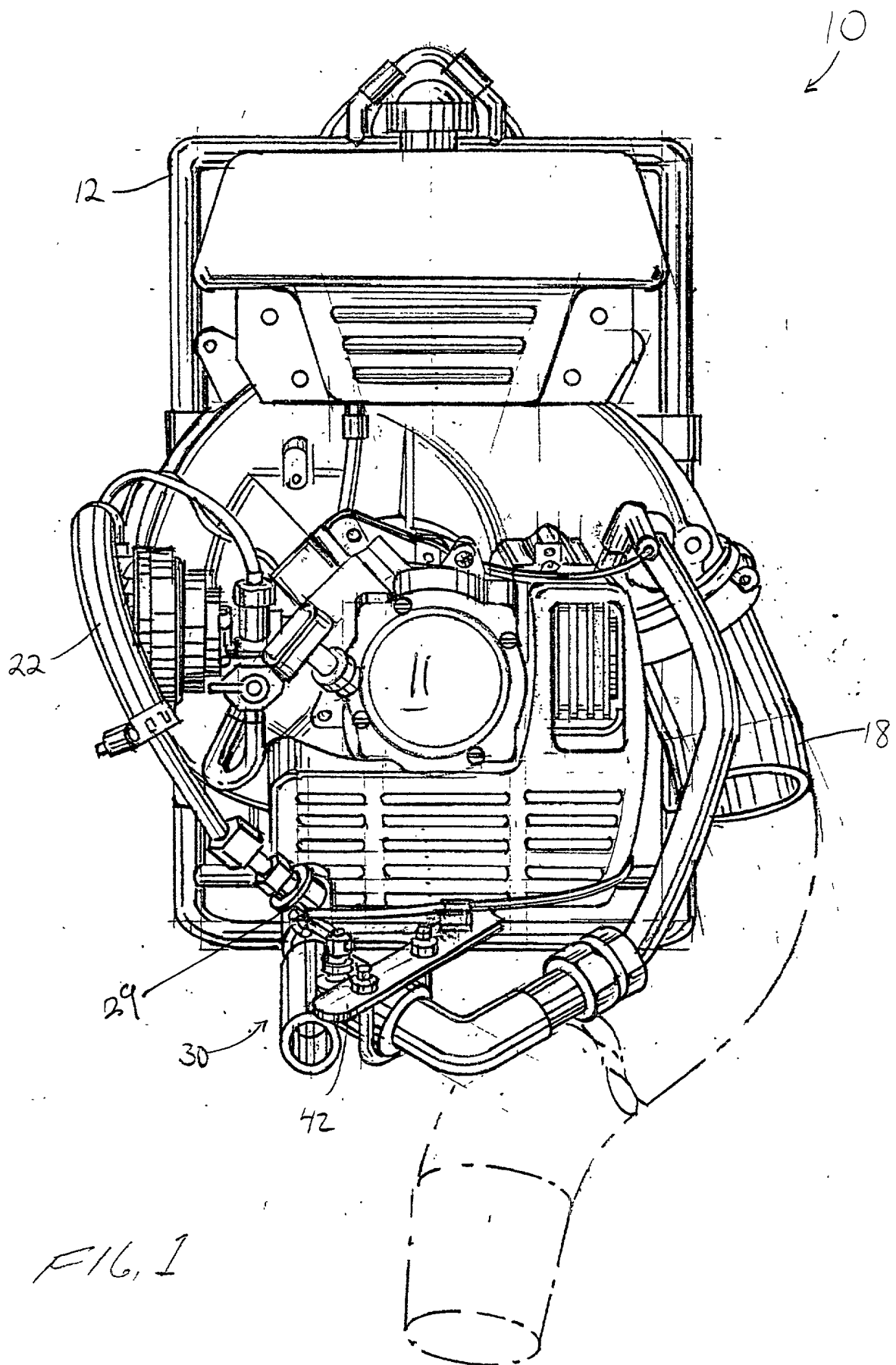
b) a valve rod connected to and extending from said pivot pin and

c) a cable attached to said valve rod for moving said valve shutter body from a first position blocking one outlet port to a second position unblocking the first outlet port and blocking the second outlet port.

ABSTRACT

The invention employs a blower of the type used by commercial landscapers. The device has an engine mounted on a frame. Shoulder straps attached to the frame allow the user to wear the device on his back leaving the hands of the operator free to operate other tools such as a chain saw or perform other tasks. Also, wearing the device on the back makes it easier to transport the device over long distances to the source of the fire or back fire to be started.

The device's blower generates a stream of air at high speeds. This stream of air can be used to feed a fire when the air is directed at a fire. When used to extinguish a fire, air from the blower is tapped from a point 180 degrees removed from the blower output and mixed with exhaust from the engine. This mixture is diverted through a Y-shaped valve into the airstream coming out of the blower. When the device is used to start back fires a fire is started. The airstream, without the mixture of air and engine exhaust can be used to both encourage the propagation of the fire and direct the fire towards the main wild fire. The ability to quickly spread the back fire in the proper direction is imperative because a sudden change in wind direction or other weather conditions could cause the back fire to become as big a problem as the original fire.

[illegible]

FILE 1

2024-03-26 14:00:00

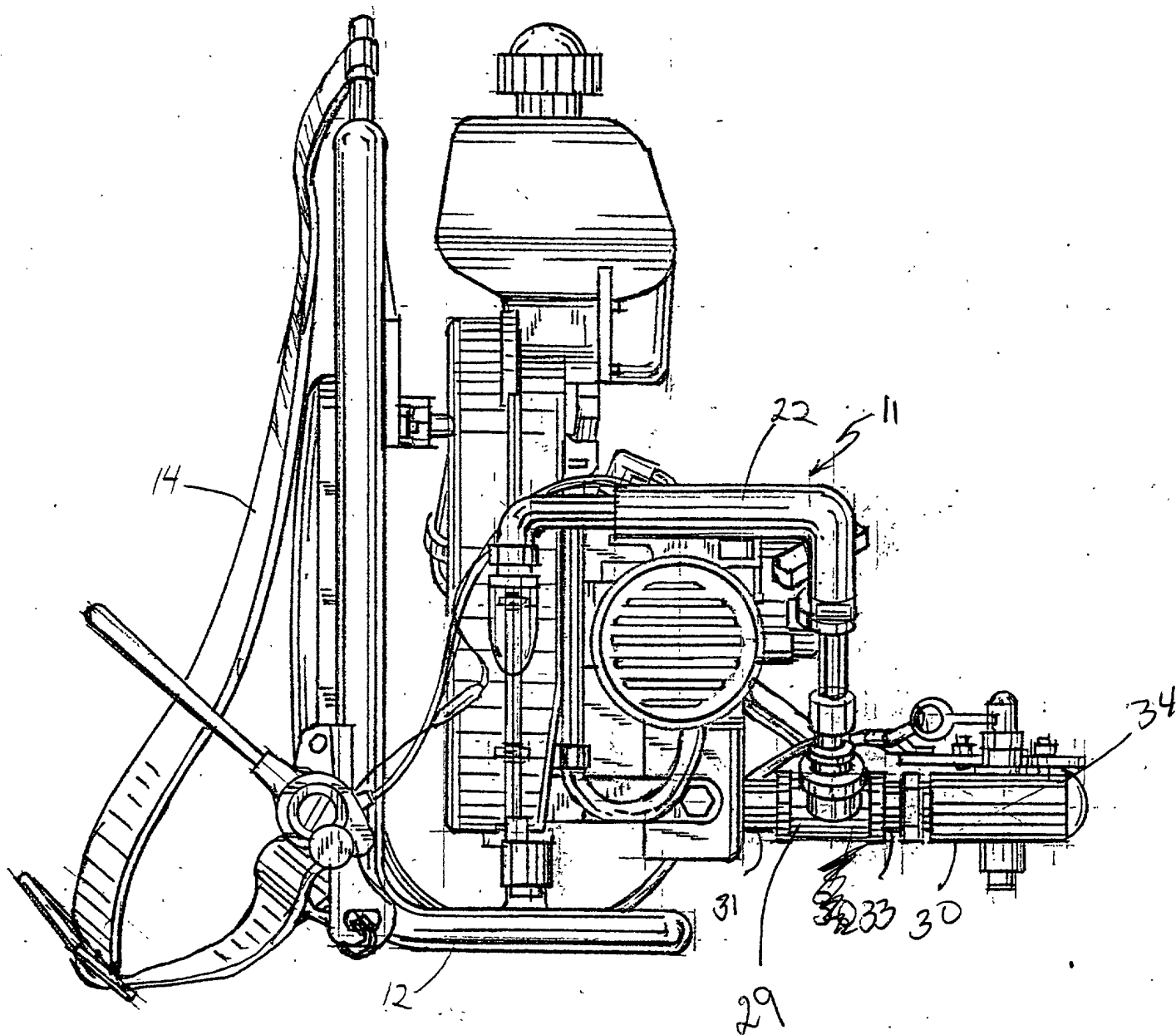


FIG. 2

F/G. 2

FIG. 4

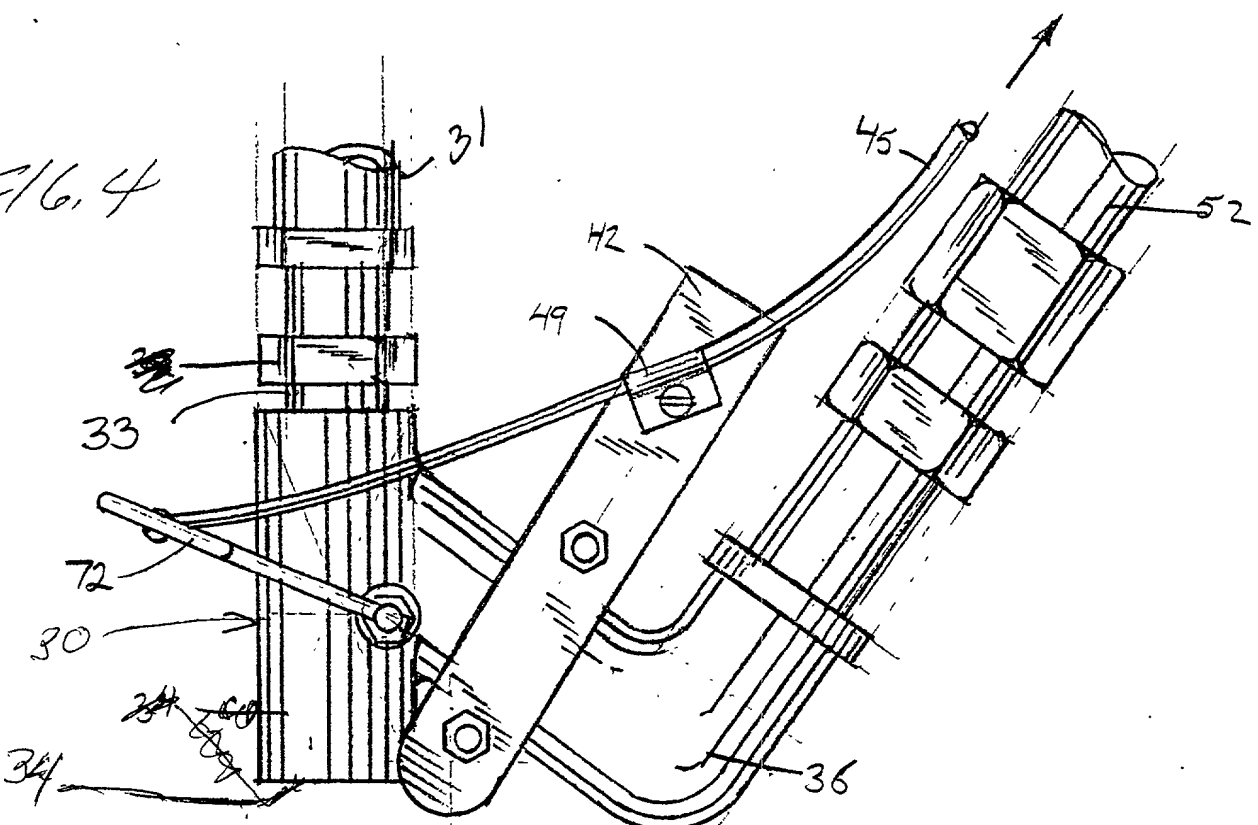


FIG. 5

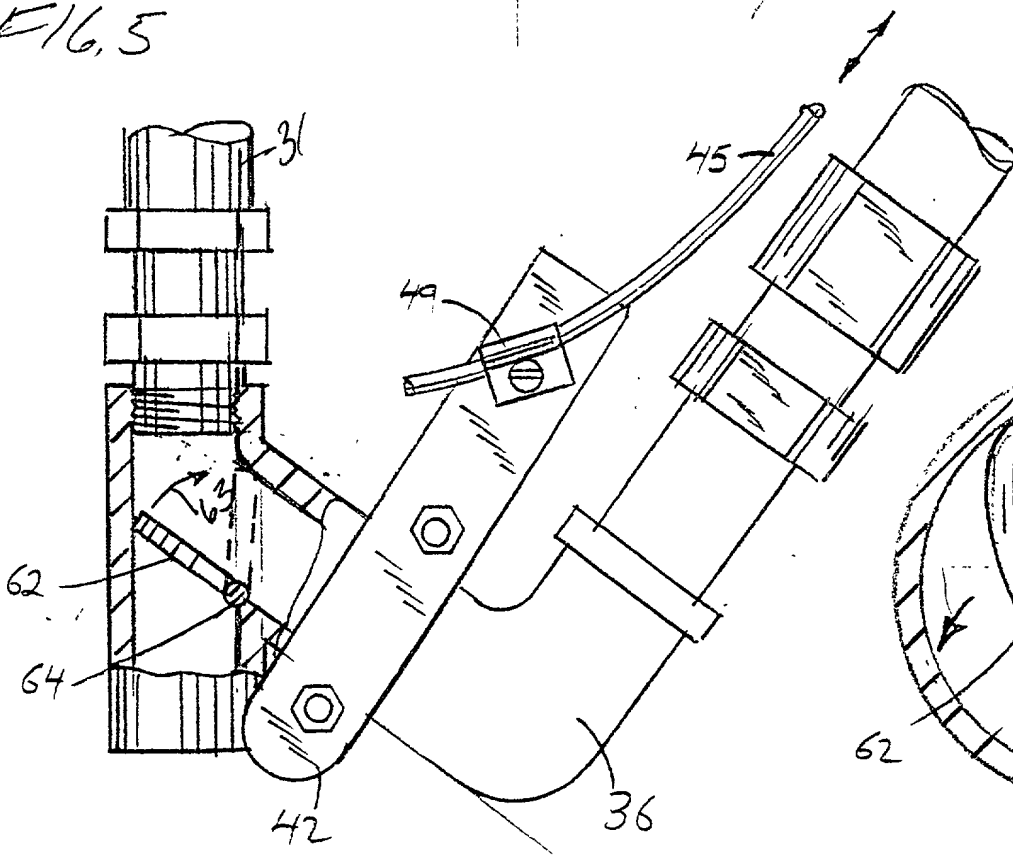
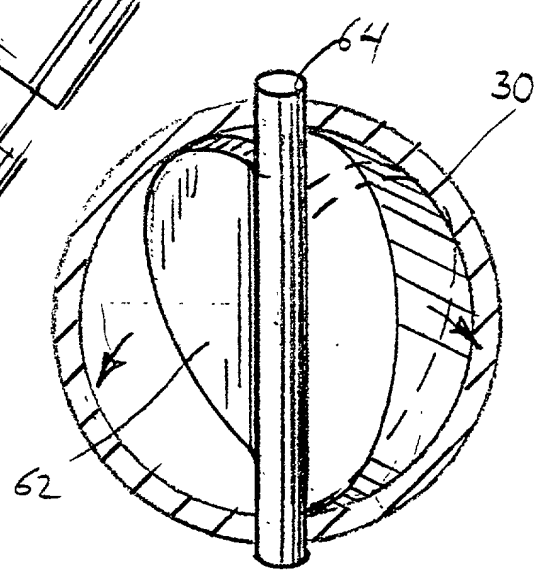


FIG. 6



2025 RELEASE UNDER E.O. 14176

COMBINED DECLARATION AND POWER OF ATTORNEY

**(ORIGINAL, DESIGN, NATIONAL STAGE OF PCT, SUPPLEMENTAL, DIVISIONAL,
CONTINUATION, OR C-I-P)**

As a below named inventor, I hereby declare that:

TYPE OF DECLARATION

This declaration is for an original application.

INVENTORSHIP IDENTIFICATION

My residence, post office address and citizenship are as stated below, next to my name. I believe that I am the original, first and sole inventor of the subject matter that is claimed, and for which a patent is sought on the invention entitled:

TITLE OF INVENTION

AIR BLOWER FOR EXTINGUISHING FIRES

SPECIFICATION IDENTIFICATION

The specification is attached hereto.

ACKNOWLEDGMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information, which is material to patentability as defined in 37, Code of Federal Regulations, Section 1.56, and which is material to the examination of this application, namely, information where there is a substantial likelihood that a reasonable Examiner would consider it important in deciding whether to allow the application to issue as a patent, and in compliance with this duty, there is attached an information disclosure statement, in accordance with 37 C.F.R. Section 1.98.

POWER OF ATTORNEY

I hereby appoint the following practitioner(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

APPOINTED PRACTITIONER(S)

Philip Furgang

REGISTRATION NUMBER(S)

24246



I hereby appoint the practitioner(s) associated with the Customer Number provided below to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

SEND CORRESPONDENCE TO

DIRECT TELEPHONE CALLS TO:

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Customer Number 021494

DECLARATION

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

SIGNATURE(S)

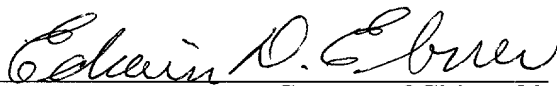
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